Subject Index to Volumes 47–52, 1992

AIDS Epidemic, A Decision Model and Methodology for, 52:149

Algebraic Multigrid Method, New Interpolation Formulas for Using Geometric Assumptions in the, 50:223

Algorithmic Models, On the Monotone Convergence of, 48:167

Asymptotic Behavior of Solutions of Competition in Gradostat with Two Limiting Complementary Substrates, 49:19

Asymptotics of the Average CRI Length of the Slotted ALOHA Collision Resolution Algorithm, 48:59

Asymptotic Stability for a Homogeneous Singularly Perturbed System of Differential Equations with Unbounded Delay, 51:1

Asymptotic Stability for Volterra Integrodifferential Systems, 52:207

Bandlimited Functions, A Numerical Evaluation of the Hankel Transform of, 48:83

Bezout Number Calculations for Multi-Homogeneous Polynomial Systems, 51:143

Bifurcation Curves for Semipositone Problems, Evolution of, When Nonlinearities Develop Multiple Zeros, 52:173

Bifurcation Structure of the Eckalbar Stock-Holding Model, 48:21

Bingham Fluid, Quantitative Error Estimate in Modeling the Laminar Stationary Flow of, 47:15

Boolean Sum-of-Product Forms, Minimal, a c-Version of, 47:91

Boundary Value Problems, Linear Second Order Singularly Perturbed, with Turning Points, Stability of a Three-Point Scheme for, 52:279

Boundary Value Problems, Periodic, for Nonlinear Higher Order Ordinary Differential Equations, 48:71

Boundary Value Problems, Second- and Third-Order Periodic, Remarks on the Lower and Upper Solutions Method for, 50:1

Boundary Value Problems, Two-Point, On Best Least Square Solutions of, via Modified Gram-Schmidt Process, 51:105

Boundary Value Problems, Two-Point, Impulsive Differential Systems for, 50:157

Boundary Value Problems, Two-Point, Involving Kronecker Products, Solution of, 50:145

Boussinesq Equations, Steady-State, A Finite-Element, Parameter Stepping Solution Procedure for, 51:43

Capital Growth of Nations, Mathematical Controllability Theory of, 52:317

Circumscribed and Inscribed Ellipsoid Methods for Solving Equilibrium Economical Models, Complexity of, 52:223

Closed-Form Solution of Singular Regular Higher-Order Difference Initial and Boundary Value Problems, 48:153

Cluster Sampling, Analysis of Mutual Information Measures in, 52:389

Coeffficient-Parameter Polynomial Continuation (Errata), 51:207

Competition in Gradostat with Two Limiting Complementary Substrates, Asymptotic Behavior of Solutions of, 49:19

Computer-Aided Method for Solvents and Spectral Factors of Matrix Polynomials, 47:211

Computer-Assisted Study of Periodic Parabolic Systems, 50:203

Computers, Using, to Seek the Optimum Combination of Investment, 49:197

Constrained Motion, On, 51:85

Convergence Analysis, On the Computation of Minimal-Energy Splines: 47:1

Cubic Polynomial, The Not-a-Knot Piecewise Interpolatory, 52:29

c-Version of Minimal Boolean Sum-of-Product Forms, 47:91

Difference Equations, Oscillations in a Class of, 48:45

Differential Equation, the Nonsymmetric Riccati Matrix, Rational Approximate Solutions and Error Bounds for, 50:23

Differential Equations, Asymptotic Stability for a Homogeneous Singularly Perturbed System of, with Unbounded Delay, 51:1

Differential Equations, Fractional, 49:205

Differential Equations, Impulsive, Application of Interval Analysis to, 47:201
Differential Equations, Second Order Neutral Functional, Oscillation Theorems for, 51:119
Differential Equations with Singular Coefficients, 47:179
Distributed Memory Architectures, Finite Element Analysis on, 52:309
Distributed-Parameter Nondispersive Systems with Tip Inertias, Noncollocated Control of, Using Time Delays, 47:47
D-Node Markov-Renewal Network Distinguished by Customer Class, Distributions of Unexpended Services in a, 52:67

Eckalbar Stock-Holding Model, Bifurcation Structure of, 48:21
Electrocardiography, The Inverse Problem in, on a Spherical Model, 48:187
Epidemics, Microscopic and Macroscopic Aspects of, 47:237
Equilibrium Economical Models, Complexity of Circumscribed and Inscribed Ellipsoid Methods for Solving, 52:223
Error Estimates for the Semidiscrete Galerkin Approximations for the FitzHugh-Nagumo Equations, 50:93
Exact Penalty Algorithm for Recourse-Constrained Stochastic Linear Programs, 49:39

Finite Element Analysis on Distributed Memory Architectures, 52:309
Finite Element Method for a Singular Problem, 49:239
Finite-Element, Parameter Stepping Solution Procedure for the Steady-State Boussinesq Equations, 51:43
Finite-Horizon Optimal Control with Pointwise Cost Functional, 52:345
Fitzhugh-Nagumo Equations, Error Estimates for the Semidiscrete Galerkin Approximations of, 50:93
Flow Through Curved Domains, Computational Aspects of: The Effect of No-Slip, 52:189
Flows, Unsteady Turbulent, Simulation by Quasisteady Models, 48:1
Forward-Scattering Amplitudes from a Focused Beam, Calculation of: Exact Values for the Gaussian Parameters, 48:101

Galerkin Method for Stefan Problems, 52:239
Gaussian Parameters, Exact Values for; Calculation of Forward-Scattering Amplitudes from a Focused Beam, 48:101
Gaussian Quadrature, A Note on the Error in, 47:25
Global Constrained Null-Controllability of Nonlinear Neutral Systems, 49:95
Graduating Sample Data Using Generalized Weibull Functions, 50:115
Gram-Schmidt Process, Modified, On Best Least Square Solutions of Two-Point Boundary Value Problems via, 51:105

Hamiltonian Cycles, Detecting, 47:137
Hankel Transform of Bandlimited Functions, A Numerical Evaluation of, 48:83
Homotopy Continuation, Computing All Solutions to Polynomial Systems Using (Errata), 51:209
Householder Transformation, Applications of, to Ridge-Type Estimation Methods, 51:159
Hyperbolic Grid Generation Scheme, Three-Dimensional, Enhancements of, 51:181

Implicit Runge-Kutta (IRK) Methods; The Nonlinear Cooling of a Semi-infinite Solid, 52:233
Impulsive Differential Systems for Two-Point Boundary Value Problems, 50:157
Inference Procedure for a Simple Epidemic Model: A Martingale Approach, 47:77
Information-Theoretic Incompleteness, 52:83
Initial and Boundary Value Problems, Singular Regular Higher-Order Difference, A Closed-Form Solution of, 48:153
Initial Value Problems, Nonstandard, Quadratically Convergent Numerical Schemes for, 47:145
Initial Value Problems, Nonstandard *n*th Order, Solutions of, 47:155
Integrodifferential Equation for the Two-Dimensional Reflection Kernel, 49:1
Interpolation Formulas, New, for Using Geometric Assumptions in the Algebraic Multigrid Method, 50:223
Interval Analysis, Application of, to Impulsive Differential Equations, 47:201
Inverse Problem in Electrocardiography on a Spherical Model, 48:187

Investment, Using Computers to Seek the Optimum Combination of, 49:197
Iterative Methods for Nonlinear Operator Equations, 51:167

JOR Iterative Method for Symmetric, Positive-Definite Matrices, Some Convergence Results Related to, 47:37

Laguerre Polynomials, Classical, The Orthogonality Property of, 50:167
Level-Constrained Programming, 47:259
Liebniz, Beyond Newton and, 52:417
Life, The Form of: It Is Possible but Not Necessary, 47:267
LISP Program-Size Complexity, 49:79; 52:103, 127, 141
Local Multigrid Method for Variational Problems, An Algebraic Study of a, 51:17

Martingale Approach; An Inference Procedure for a Simple Epidemic Model, 47:77
Mathematical Controllability Theory of Capital Growth of Nations, 52:317
Matrix-Geometric Solution of a Multiserver Queue with Markovian Group Arrivals and Coxian Servers, 49:177
Matrix Inversion, Neural Network Approach to Computing, 47:109
Matrix Polynomials, A Computer-Aided Method for Solvents and Spectral Factors of, 47:211
Minimal-Energy Splines, On the Computations of: Convergence Analysis, 47:1
Mixed Monotone Operator Equations, Iterative Method for Coupled Quasi-solutions of, 52:301
Modeling H^+ and K^+ Transport Across Cell Membranes, 50:33
Modeling the Laminar Stationary Flow of a Bingham Fluid, Quantitative Error Estimate in, 47:15
Monotone Convergence of Algorithmic Models, 48:167
Monotone Enclosure for Nonlinear PDEs Using Multigrid Techniques, 47:121
Monotone Iterations for Numerical Solutions of Nonlinear Elliptic Partial Differential Equations, 50:59
Motion, Constrained, 51:85
Multiblock Grids, Automatic Topology Generation for, 52:355
Multidimensional Living Systems, A Formalism of, Based on Nonstandard Analysis, 49:231
Multi-Homogeneous Polynomial Systems, Bezout Number Calculations for, 51:143
Multisector Economy with Consumption, On the Existence of Weakly Maximal Programs for a, 48:177
Multiserver Queue with Markovian Group Arrivals and Coxian Servers, Matrix-Geometric Solution of, 49:177
Mutual Information Measures in Cluster Sampling, Analysis of, 52:389

Neural Network Approach to Computing Matrix Inversion, 47:109
Newton and Liebniz, Beyond, 52:417
Newton-Type Methods, Slope Tests for, 52:403
Noncollocated Control of Distributed-Parameter Nondispersive Systems with Tip Inertias Using Time Delays, 47:47
Nonconvergence of Iteration, Using, to Partition ODEs, 49:111
Nonlinear Constraints, A Method of Reconciliation of Measured Data with, 49:141
Nonlinear Cooling of a Semi-infinite Solid: Implicit Runge-Kutta (IRK) Methods, 52:233
Nonlinear Elliptic Partial Differential Equations, Monotone Iterations for Numerical Solutions of, 50:59
Nonlinear Higher Order Ordinary Differential Equations, Periodic Boundary Value Problems for, 48:71
Nonlinear Neutral Systems, Global Constrained Null-Controllability of, 49:95
Nonlinear Operator Equations, Iterative Methods for, 51:167
Nonlinear PDEs, Monotone Enclosure for, Using Multigrid Techniques, 47:121
Nonstandard Analysis, A Formalism of Multidimensional Living Systems Based on, 49:231
No-Slip, The Effect of; Computational Aspects of Flow Through Curved Domains, 52:189
Not-a-Knot Piecewise Interpolatory Cubic Polynomial, 52:29
Numerical Integration of Unequally Spaced Data, A Method for, 50:45

ODEs, Using Nonconvergence of Iteration to Partition, 49:111
Optimal Control Problems, All-Time-Step Constrained Discrete-Time, An Exact Penalty Function Approach to, 49:215
Optimum Exponential Regression with One Nonlinear Term, 50:51
Orders of Singularity of Sectionally Analytic Functions, Computation of, 48:13
Orthogonality Property of the Classical Laguerre Polynomials, 50:167
Oscillation, Self-Sustained, in Economics, 49:63
Oscillations in a Class of Difference Equations, 48:45
Oscillation Theorems for Second Order Neutral Functional Differential Equations, 51:119
Outflow Derivative for Singular Perturbation Problems, A Note on the Computation of, 51:135

Padé Approximation and Its Application in Time Series Analysis, 48:139
Parameter-Dependent Self-Adjoint Problems, The Sinc-Galerkin Method for, 50:175
Partial Differential Equations, Nonlinear Elliptic, Monotone Iterations for Numerical Solutions of, 50:59
Penalty Function Approach to All-Time-Step Constrained Discrete-Time Optimal Control Problems, An Exact, 49:215
Periodic Parabolic Systems, A Computer-Assisted Study of, 50:203

Quadratically Convergent Numerical Schemes for Nonstandard Initial Value Problems, 47:145
Quasisteady Models, Simulation of Unsteady Turbulent Flows by, 48:1
Queue, Multiserver, with Markovian Group Arrivals and Coxian Servers, Matrix-Geometric Solution of, 49:177

Radiation Therapy Treatment Planning: An $\mathscr{L}^2$ Approach, 52:251
Random Eigenvalues, Algebraic Methods and Structural Dynamic Models, 52:37
Regression, Optimum Exponential, with One Nonlinear Term, 50:51
Resolution-Limited Measure and Dimension, 52:1
Riccati Matrix Differential Equation, the Nonsymmetric, Rational Approximate Solutions and Error Bounds for, 50:23
Ridge-Type Estimation Methods, Applications of the Householder Transformation to, 51:159

Sectionally Analytic Functions, Computation of the Orders of Singularity of, 48:13
Semigroups, An Abstract Spectral Approximation Theorem from the Theory of, 47:185
Semipositone Problems, Evolution of Bifurcation Curves for, When Nonlinearities Develop Multiple Zeros, 52:173
Shooting Algorithm for Sturm-Liouville Eigenvalue Problems with Periodic and Semi-Periodic Boundary Conditions, 51:87
Simulation of Unsteady Turbulent Flows by Quasisteady Models, 48:1
Sinc-Galerkin Method for Parameter-Dependent Self-Adjoint Problems, 50:175
Singular Perturbation Problems, A Note on the Computation of the Outflow Derivative for, 51:135
Singular Problem, On the Finite Element Method for a, 49:239
Slope Tests for Newton-Type Methods, 52:403
Slotted ALOHA Collision Resolution Algorithm, On the Asymptotics of the Average CRI Length of the, 48:59
Spectral Approximation Theorem from the Theory of Semigroups, An Abstract, 47:185
Spectral Factors for Matrix Polynomials, A Computer-Aided Method for Solvents and, 47:211
Stefan Problems, A Galerkin Method for, 52:239
Stochastic Linear Programs, Recourse-Constrained, An Exact Penalty Algorithm for, 49:39
Structural Dynamic Models; Random Eigenvalues, Algebraic Methods and, 52:37
Sturm-Liouville Eigenvalue Problems with Periodic and Semi-Periodic Boundary Conditions, On Shooting Algorithm for, 51:87
Symmetric, Positive-Definite Matrices, Some Convergence Results Related to the JOR Iterative Method for, 47:37

Time Series Analysis, Padé Approximation and Its Application in, 48:139
Topology Generation, Automatic, for Multiblock Grids, 52:355
Transport Across Cell Membranes, H^+ and K^+, Modeling, 50:33
Two-Dimensional Reflection Kernel, An Integrodifferential Equation for, 49:1

Unequally Spaced Data, A Method for the Numerical Integration of, 50:45

Variational Problems, An Algebraic Study of a Local Multigrid Method for, 51:17
Volterra Integrodifferential Systems, Asymptotic Stability for, 52:207

Weakly Maximal Programs for a Multisector Economy with Consumption, On the Existence of, 48:177
Weibull Functions, Generalized, Graduating Sample Data Using, 50:115